

Project Title: Stemilt Project Ditch Improvement Project

[If your Watershed Plan Implementation and Flow Achievement Request is related to or part of a Operational Project Funding Request for 2009-11 please cross-reference the name of that project in parenthesis above]

County: Chelan

WRIA: 40A

If more space is needed attach additional sheets

1. Applicant Information		
Applicant name Stemilt Project	Phone no. (509)662-3611	Fax no. (509)662-3613
Address 4597 Stemilt Hill Rd		
City WENATCHEE	State Wa	Zip code 98801
Email address Kyle.mathison@stemilt.com or carlson5@tumwater.net		
Water right holder name (If applicable and if other than applicant) Stemilt Project Inc.	Phone Number ()	Fax Number ()
Mailing address Same as above		
City	State	Zip code

2. Project Location
Project name Stemilt Project Ditch Improvement Project- Lily Lake to Stemilt Project
Project location The project is located in the Stemilt Basin just south of Wenatchee, Wa. See attached maps. The project runs from Lily Lake Reservoir to Stemilt Project Reservoir.
Stream reach mile or location Stemilt Creek. Approximately reach mile 7.

3. Project Type and Description

(Check all that apply)

Conservation and/or infrastructure improvement
(pumps and pipes)

X

Water storage feasibility study

☐

Water exchange or water right acquisition

☐

Please describe your project in detail

The purpose of the project would be to bypass Lily Lake Reservoir and pipe the remainder of the existing ditch that runs to the Stemilt Project Reservoir.

Use this box to make any other comments regarding the project and water rights involved:

According to the WRIA 40A Multi-Purpose Water Storage Assessment, minimizing the loss of physically available water from active, leaking ditches, pipelines and reservoirs represents the “low hanging fruit” for storage improvement opportunities in WRIA 40A. Little or no permitting is required, few impacts would result, no changes in water rights or operations are necessary and the benefit of increased availability of water in the watershed is clear. The unlined ditch between Lily Lake and the Stemilt Project reservoir has water conveyance losses of 22 to 33 acre feet. By lining/piping the ditch this water loss would be saved. The project has been identified as the top priority for the Stemilt Project and has also been ranked as a Priority 1, Tier 1 project in the Draft WRIA 40A Detailed Implementation Plan. Also, by bypassing Lily Lake an estimated 1100 ac/ft of water would be saved due to the top 7 feet of the reservoir losing approximately 1120 gal/minute.

Describe the project by task (statement of work)

TASK 1: Engineering and Design – Engineer and design bypass for Lily Lake. Engineer and design lining /piping for existing ditch from Lily Lake to Stemilt Project.

Timeline: Summer 2009

TASK 2: Installation/Construction – Construct bypass for Lily Lake and install lining/pipe in existing leaking ditch from Lily Lake to the Stemilt Project.

Timeline: Fall 2009

4. Project Budget

Project Budget

\$258,900

Total budget by project task or by expenditure

Task 1: Engineering and Design – \$5,000

Task 2: Installation/Construction –

Materials: 4500 ft HDPE 16” SDR 21 @ \$21.20/ft = \$95,400

Valves and Flanges = \$3,000

Installation: Equipment Mobilization = \$3,000

Installation of 4500ft @ \$35/ft = \$157,500

Total = \$258,900

5. Funding Source Information

Total project amount expected to be provided by sources other than this program (dollar total and percent of project budget)

\$60,000

Identify sources and type of funding other than through this program grant. Include expected dates of participation. Include as an attachment; letters of commitment, offer letters, application approvals, etc.

Source and type of funding: Stemilt Project Cash Reserves (See attached letter of commitment)

Amount: \$60,000

Status: Currently available

Dates of participation: Summer 2009

Source and type of funding:

Amount:

Status:

Dates of participation:

Source and type of funding:

Amount:

Status:

Dates of participation:

Source and type of funding:

Amount:

Status:

Dates of participation:

Source and type of funding:

Amount:

Status:

Dates of participation:

Source and type of funding:

Amount:

Status:

Dates of participation:

6. Instream Flow and other Instream Habitat Benefits

A. Water Right Information - Attach Water Right documents

(You may skip this section if this application is for Storage Feasibility Study funding)

Water right holder's name (if other than applicant)	Phone no: ()	Fax no: ()
Address		
City	State	Zip code

Complete legal description of the property attached to this water right:

LEGAL DESCRIPTION OF PROPERTY ON WHICH WATER IS USED

E1/2 of the SW1/4 of Section 1, the E1/2 of Section 2, the E1/2 of Section 11, the N1/2 of Section 12, the S1/2 of the N1/2 of Section 14, all in T21N, R20 EWM and all in Chelan County; and
All property Easterly of Stemilt Loop Road (a.k.a. Wheeler Hill Road) described as follows: The West half of the Southwest quarter, the Southwest quarter of the Northwest quarter, and Lot 4, all in Section 2, and Lots 1 and 2 and the South half of the Northeast quarter and all of the Southeast quarter of Section 3, all in Township 21 North, Range 20 East of the Willamette Meridian, Chelan County, Washington, Except that portion of the North 10 rods of the aforesaid Lots 1 and 2 lying East of a line 1150 feet East of the West line of said Lot 2; and
Section 10, Township 21 North, Range 20 East of the Willamette Meridian, Chelan County, Washington. Except the SE1/4 of the SE1/4 and those portions reserved for the exclusive use of the United States Air Force; and
NW1/4 of Section 6, T 21 N., Range 21 E.W.M., and the E1/2 of the NE1/4 of Section 1, T 21 N., Range 20 E.W.M. all in Chelan County, Washington; and
The SW1/4 of the NW1/4 of Section 11 in T 21 N., R20, E.W.M. in Chelan County, Washington. The SW ¼ of the NW ¼ of Section 15 and the W ½ of the SE ¼ of the NW ¼ of Section 15. All of these Sections are within T 21 N., R20, E.W.M. in Chelan County, Washington.

Water right number: S4-01244C

Parcel number associated with this water right: 1/4NW, 1/4NE, Section 27, T 21N, R 20
See Attachment

Do you own the property proposed for this project? If not, please explain:

Lily Lake and the irrigation ditch are on Washington Department of Natural Resources property. The Stemilt Project has all appropriate easements secured.

If the grant applicant is not the water right holder, please explain the reason:

Water source: (Stream name). S. Fork Stemilt Creek

B. Water Usage

Has water been put to beneficial use in the past five years?

Yes ☒ No ☐ I don't know ☐

Describe that use in terms of the specific beneficial use during that period:

Water is used for irrigation of orchard crops. See attached Synopsis of Metered Water Use.

(Please attach any available documents that verify that use during the last five years. Include aerial photographs, power company records, flow meter records, crop type records, NRCS documentation or FSA records)

Has beneficial use of this water ceased for a period of five or more years during any period since 1967?
Yes ☐ No **X**

Please describe the beneficial use for the water quantified under the water right discussed above. Describe the following: purpose (examples: domestic, irrigation, municipal); system type; if irrigation, describe crop type.

Purpose – irrigation

System Type – gravity ditch

Crop Type – Cherry Orchards

Quantify as nearly as possible current water use:

Instantaneous rate (QI) of use: 20 CFS

Annual rate (QA) of use 500 ACRE- FEET

Historic beneficial use quantity of the water right (highest of the last 5 years/ irrigation seasons in instantaneous and annual quantities)

20 CFS 500 ACRE-FEET

If irrigation, how many acres are irrigated under this water right? **500**

Are there other water rights associated with this specific water right? Yes

In order to process this pre-application ecology requires the following information (include for the previous five years; please attach copies of all documents and maps)

- ◆ Power data (contact local power utility for pump records, etc.) – **N/A Gravity system**
- ◆ Historical crop type data (contact local FSA office)
- ◆ Flow meter records (contact local power utility)
- ◆ Aerial photos (contact local FSA office)

C. Estimated Total Water Savings

Infrastructure projects: Estimate the water to be conserved through this project. Provide engineering or technical analysis to support this estimate. (Estimates provided by Stemilt Project representative)

*Estimated water saving for piping existing ditch

MONTH	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOT
QA (ACRE-FEET)				59.5 *5	297 *5	297 *5	149 *5	149 *5	149 *5				1100.5 *30
QI (CFS)				1	5	5	2.5	2.5	2.5				18.5

D. Additional Instream Benefits

Describe other instream benefits envisioned as a result of funding this project:

The point of diversion for this project is approximately 7 miles up Stemilt Creek. The instream benefit for this project is that less water would be needed for diversion therefore leaving more water in Stemilt Creek for the lower 7 miles of stream.

According to the Stemilt Project representatives the top 7 feet of Lily Lake leaks approximately 1120 gal/minute (See above water savings estimates). By bypassing Lily Lake 1100 ac/ft would be saved and pipeing the remainder of the existing ditch would save an additional 30 ac/ft

7. Resources currently committed to ensure long-term performance of the proposed project (operation and maintenance).

Who is responsible for long-term operation and maintenance of the project?
Stemilt Project owners

Have operation and maintenance costs been identified? Yes ☒ No ☐

If yes, please describe: Current operation and maintenance costs are approximately \$4,100 per year. The improvements proposed in this proposal would add very little to annual O&M costs.

Summarize these costs on an annual basis below:

Brush maintenance on dams, reading meters, cleaning out diversion points and valve and pipe repairs as needed.

Are measurement devices other than diversion source meters necessary to monitor compliance with the project intent or plan? Yes ☐ No ☒

If yes, please describe:

Does a water measurement device exist on the source and downstream of the proposed project?
X yes ☐ no

If no, will a water measurement device be installed as part of this project? Yes ☐ No ☐

If yes, describe location and operating entity: Source – Diversion box on Stemilt Cr. (Weir)
Weir between Lily and Stemilt Project.

If yes, provide the river mile: 7

What is the nearest stream gage downstream of the proposed project? Source name

A DOE telemetered stream gage exists on Stemilt Creek near the mouth. ID# 40B060

<https://fortress.wa.gov/ecy/wrx/wrx/flows/station.asp?sta=40B060>

The installation of this stream gage was an early implementation action recommended by the WRIA 40A Watershed Plan.

River mile : 1.0

8. Proponent's Readiness to Proceed

Describe status of feasibility reports, engineering design, and permits. Provide documentation for these deliverables and describe the project effort timeline as appropriate (submit two (2) copies of all required documents).

This project was identified in the WRIA 40A Multi-Purpose Water Storage Assessment as part of Phase 2 of Watershed Planning. The project has also been ranked as a number 1 priority for The Stemilt Project and as a top priority project for the WRIA 40A Planning Unit. (See WRIA 40A DIP Implementation Table).

Does the project proponent own the land for the proposed project? If not, does the proponent have documented access to the right of way or owns an easement to the property proposed (please attach appropriate documentation including title report as applicable).

Yes

Design/Engineering Status: Currently no Design/Engineering has been completed

Pre-planning (pre - permitting)	<input type="checkbox"/>	Status:
Pre-design (design reports) (10%)	<input type="checkbox"/>	Status:
Schematic design (30%)	<input type="checkbox"/>	Status:
Design development (75%)	<input type="checkbox"/>	Status:
Construction documents (95%)	<input type="checkbox"/>	Status:
Bid documents (ready for bid)	<input type="checkbox"/>	Status:

Permit Status: Currently no permits have been applied for regarding this project.

SEPA	<input type="checkbox"/>	Status:
401	<input type="checkbox"/>	Status:
Dept. of Fish and Wildlife consultation	<input type="checkbox"/>	Status:
Storage and/or Secondary Use Permit	<input type="checkbox"/>	Status:
Other: (_____)	<input type="checkbox"/>	Status:
Other:(_____)	<input type="checkbox"/>	Status:
Other: (_____)	<input type="checkbox"/>	Status:

9. Signatures (send this sheet electronically and by original signature in surface mail)

I certify that the information above is true and accurate to the best of my knowledge.

I understand that in order to process my application, I am hereby granting staff from the Department of Ecology access to the above site(s) for inspection and monitoring purposes.

If assisted in the preparation of the above application, I understand that all responsibility for the accuracy of the information rests with me.

I also understand that I may rescind this application at any time prior to signing the Agreement with no other obligations or requirements.

Stemilt Project Inc Derek Carlson-president
(Applicant/ Grant Recipient) 11 / 24 / 08
(Date)

Same as Applicant
(Water Right Holder) / /
(Date)

Derek Carlson - president
(Land Owner(s) of Existing Place of Use) 11 / 24 / 08
(Date)

For More Information Contact:

Dave Burdick

Voice: (360) 407-6094

Email: dbur461@ecy.wa.gov

Web:

<http://www.ecy.wa.gov/watershed/Indices.html>

If you need this document in an alternate format, please call the Water Resources Program at 360-407-6600. Persons with hearing loss can call 711 for Washington Relay Service. Persons with a speech disability can call 877-833-6341.

see
sect. on b. 13

Stemilt Project.
Synopsis of metered water use
For the years 2004-2008

Year	acre-feet used.
2004	332.94 acre feet
2005	458.21 acre feet
2006	371.14 acre feet
2007	459.33 acre feet
2008	416.49 acre feet



Herb Gardner
Project meter reader.

Dec 1, 2008

Letter of Intent

The owners of the Stemilt Project have agreed to pay up to \$60000 towards bypassing Lilly Lake.

Derek Carlson President - Stemilt Project

Derek Carlson

This is a black and white aerial photograph of a river valley. The Columbia River flows along the top edge of the image. Below the river, the landscape is a mix of agricultural fields, some of which are outlined with white lines, and wooded areas. Several water bodies are visible, including a large pond in the center-right and a smaller one in the lower-left. A road or path runs vertically through the left side of the image. In the bottom right corner, there is a legend box with the word "Legend" inside. Various features are labeled with text: "Columbia River" at the top, "Stem Creek" on the left, "Wedge Canyon" at the bottom center, and "Dry Gulch" on the bottom right.

Columbia River

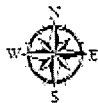
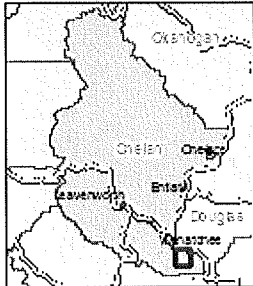
Stem Creek

Wedge Canyon

Dry Gulch

Legend

Locator Map



0 1,650 3,300 6,600 9,900

Feet



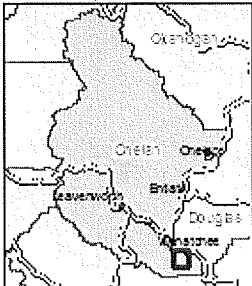
The County makes no warranty, expressed or implied, concerning the data's content, accuracy, currency or completeness, or concerning the results to be obtained from queries or use of the data. ALL DATA IS EXPRESSLY PROVIDED "AS IS" AND "WITH ALL FAULTS". The County makes no warranty of fitness for a particular purpose, and no representation as to the quality of any data. The Requester shall have no remedy at law or equity against the county in case the data provided is inaccurate, incomplete or otherwise defective in any way.

Stemilt Project Area of Water Distribution 1998



Legend

Locator Map



0 1,650 3,300 6,600 9,900 Feet

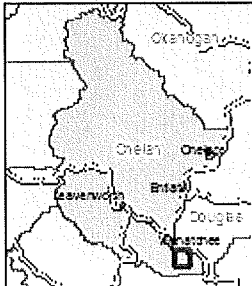


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Legend

- Water
- Barren
- Shrub
- Grass
- Forest
- Urban
- Barren
- Shrub
- Grass
- Forest
- Urban

Locator Map



0 1,650 3,300 6,600 9,900

Feet



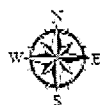
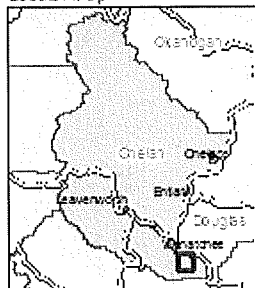
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Stemilt Project Area of Water Distribution 2006



Legend

Locator Map

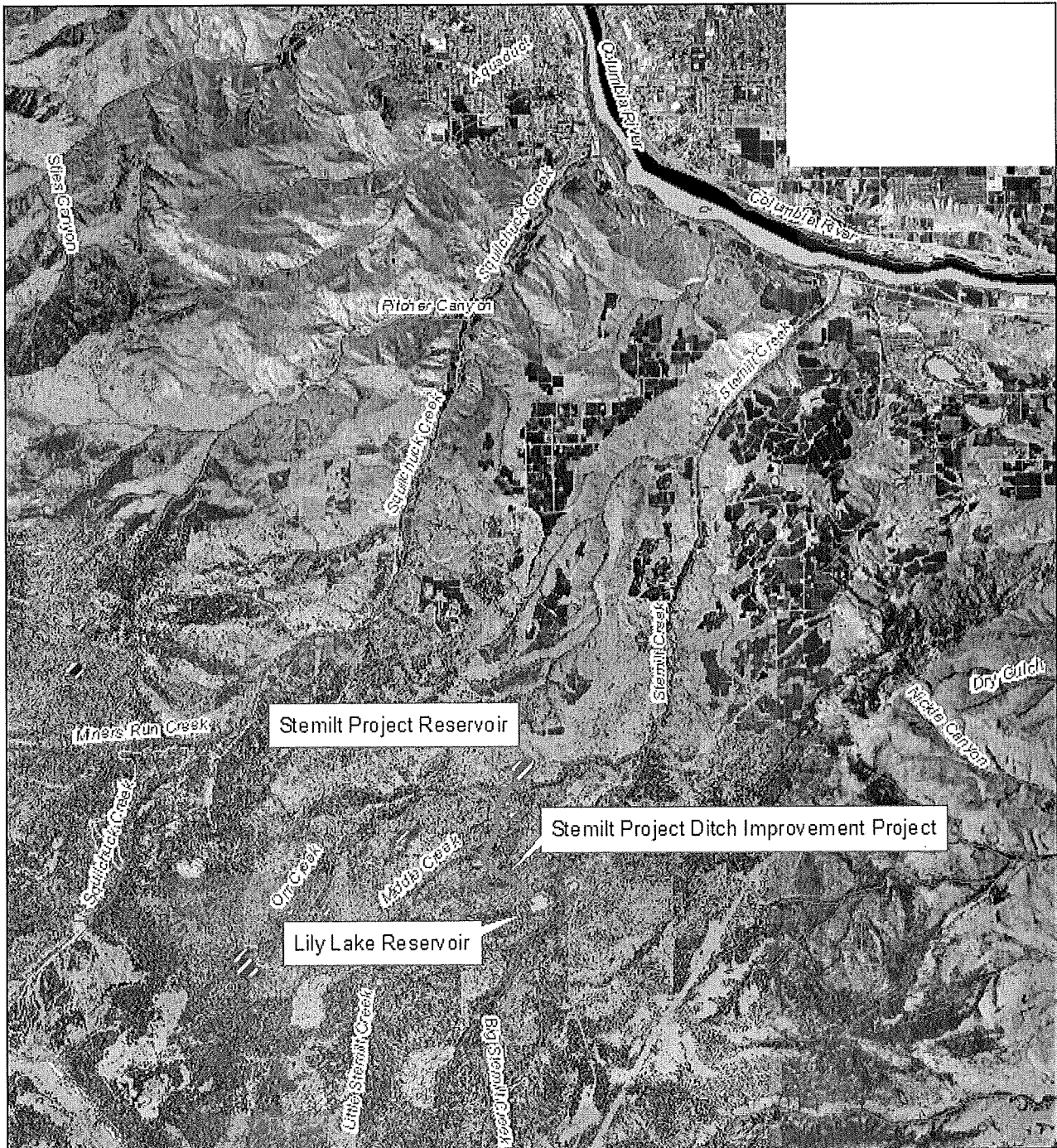
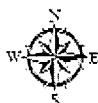


0 1,650 3,300 6,600 9,900 Feet



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Stemilt Project Ditch Improvement Location Map

[illegible]

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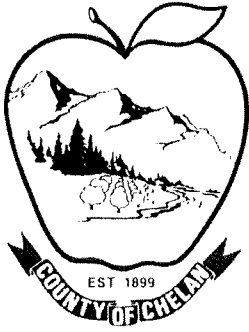
0	3,100	6,200	12,400	18,600
				Fee

An aerial photograph of a rural landscape with various water features. A large reservoir, labeled 'Stemilt Project Reservoir', is located in the upper left quadrant and is filled with a diagonal hatching pattern. A network of ditches and creeks crisscrosses the terrain. A specific section of a ditch is highlighted with a dashed line and labeled 'Stemilt Project Ditch Improvement Project'. In the lower left, there is a smaller body of water labeled 'Lily Lake Reservoir'. Several creeks are labeled: 'Middle Creek' flows from the left towards the center; 'South Creek' flows from the bottom center towards the right; and 'Little Stemilt Creek' flows from the bottom left towards the center. Other creeks labeled include 'Ct Creek' and 'Stemilt Creek' in the upper right. The terrain appears to be a mix of agricultural fields and wooded areas.

A map of the study area in the north-eastern part of the Niger River basin. The map shows the Niger River and several locations: Okegbo, Onien, Onye, Eze, Leavenworth, Doube, and Onyiah. A scale bar indicates 0 to 100 km.



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Chelan County Natural Resource Department
316 Washington Street, Suite 401, Wenatchee, WA 98801
Phone (509) 667-6640 Fax (509) 667-6527

Dave,

Enclosed is the grant application for the Stemilt Project Ditch Improvement Project. You will also receive electronic copies of this material. Please contact me if you have any questions. Thank you for your time and consideration.

Lee P. Duncan
Natural Resource Specialist



Section 2.2

Capital Budget Grant Request Form

Watershed Plan Implementation and Flow

Achievement

Grant Request Due Dates

- ◆ Application materials are due to the Department of Ecology by **5 p.m. December 31, 2008**.
- ◆ Application materials submitted after the due date will receive a low priority for funding or will be referred to the next biennium's funding cycle.

Application Submittal

Applications must be submitted **electronically** in MS Office 2003 or 2007 or Adobe PDF to Dave Burdick at:

dbur461@ecy.wa.gov.

Since this application requires a signature in block #8, please send in an original signature, before or after the submittal deadline, using one of the following methods:

Regular Mail:

Department of Ecology - Water Resources Program
PO Box 47600
Olympia, WA 98504-7600

Overnight or Hand Delivery Physical Address:

Department of Ecology Headquarters
Water Resources Program
300 Desmond Drive
Lacey, WA 98503

For More Information Contact:

Dave Burdick
Voice: (360) 407-6094
Email: dbur461@ecy.wa.gov

Availability of Forms:

All forms required for grant requests are also available online at:
<http://www.ecy.wa.gov/watershed/index.html>

Key Grant Application and Award Timelines:

- ◆ **October 1 through December 31, 2008:** Application filing period. Grant application forms available. Interested applicants submit grant application documents to the Ecology.
- ◆ **February through mid-April 2009:** Ecology and Washington State Department of Fish and Wildlife staff conducts technical merit reviews of project submittals, including assessing existing water rights, site visits, map studies, and

consultations with the applicant, affected Lead Agencies, or local governments and watershed planning groups.

- ◆ **April through May, 2009:** Ecology funding review.
- ◆ **June 2009:** Formal announcement of approved funding list.
- ◆ **July 2009 and ongoing:** Funded projects grant/contract writing and signing, project work and deliverables, performance monitoring, billing, etc.